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OM protein - protein search, using sw model

Run on: March 17, 2004, 18:47:23 ; Search time 25.0763 Seconds

(without alignment)

Title: US-09-989-981a-6

Sequence: 1 MGDLSSLTPGSGMGLQVNRG.....PALVILGIVKIRHLSR 651

Scoring table: BLOSUM62

Searched: 1045404 seqs, 257433775 residues

Total number of hits satisfying chosen parameters: 1045404

Minimum DB seq length: 0

Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database: Published Applications-AA.\*  
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2: /cgn2\_6/ptodata/1/pubppa/PCT\_NEW\_PUB.pep.\*  
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13: /cgn2\_6/ptodata/1/pubppa/US10A\_PUBCOMB.pep.\*  
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17: /cgn2\_6/ptodata/1/pubppa/US60\_NEW\_PUB.pep.\*  
18: /cgn2\_6/ptodata/1/pubppa/US60\_PUBCOMB.pep.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	3326	100.0	651	9	US-09-837-992-3
2	3326	100.0	651	10	US-09-989-981a-6
3	3326	100.0	651	14	US-10-090-455-6
4	2744.5	82.5	652	9	US-09-837-992-1
5	2744.5	82.5	652	10	US-09-989-981a-2
6	1308	39.3	256	15	US-10-104-047-2795
7	697	21.0	672	10	US-09-989-981a-4
8	697	21.0	673	10	US-09-989-981a-8
9	697	21.0	673	14	US-10-090-455-7
10	682.5	20.5	655	10	US-09-961-086-1
11	682.5	20.5	655	15	US-10-405-806-13
12	680.5	20.5	655	9	US-09-981-353-35
13	680.5	20.5	655	14	US-10-120-687-61
14	680.5	20.5	655	15	US-10-405-806-2
15	674.5	20.3	655	9	US-09-866-866A-10

16	674.5	20.3	655	14	US-10-090-455-5	Sequence 5, Appl
17	672.5	20.2	655	9	US-09-866-866A-27	Sequence 27, Appl
18	660	19.8	657	9	US-09-866-866A-14	Sequence 14, Appl
19	627	18.9	1095	15	US-10-369-493-2025	Sequence 2025, Ap
20	621	18.7	1049	15	US-10-369-493-1520	Sequence 1520, Ap
21	613	18.4	819	12	US-10-425-114-54421	Sequence 54421, A
22	610	18.3	725	12	US-10-424-599-175941	Sequence 175941,
23	609.5	18.3	695	12	US-10-424-599-176182	Sequence 176182,
24	602.5	18.1	663	13	US-10-108-605-245	Sequence 245, App
25	598.5	18.0	674	14	US-10-090-455-4	Sequence 4, Appl
26	598.5	18.0	674	16	US-10-429-160-10	Sequence 10, Appl
27	595.5	17.9	658	15	US-10-369-493-5347	Sequence 5347, Ap
28	590.5	17.8	638	13	US-10-072-621-10	Sequence 10, Appl
29	585.5	17.6	645	13	US-10-072-621-9	Sequence 9, Appl
30	585.5	17.6	646	14	US-10-090-455-2	Sequence 2, Appl
31	578.5	17.4	627	14	US-10-090-455-8	Sequence 8, Appl
32	578	17.4	604	9	US-09-745-763-197	Sequence 197, App
33	574.5	17.3	1084	12	US-10-424-599-242078	Sequence 242078,
34	574.5	17.3	1101	12	US-10-425-114-63125	Sequence 63125, A
35	571.5	17.2	646	14	US-10-079-087-2	Sequence 2, Appl
36	570.5	17.2	646	13	US-10-154-452-4	Sequence 4, Appl
37	569	17.1	623	12	US-10-424-599-154459	Sequence 154459,
38	567.5	17.1	623	14	US-10-090-455-13	Sequence 13, Appl
39	565.5	17.0	599	14	US-10-210-130-14	Sequence 14, Appl
40	562.5	16.9	646	13	US-10-154-452-8	Sequence 8, Appl
41	554	16.7	559	15	US-10-369-493-5740	Sequence 5740, Ap
42	545.5	16.4	608	15	US-10-369-493-5748	Sequence 5748, Ap
43	541.5	16.3	706	12	US-10-424-599-238651	Sequence 238651,
44	540.5	16.3	656	12	US-10-425-114-53846	Sequence 53846, A
45	540.5	16.3	673	12	US-10-425-114-64380	Sequence 64380, A

## ALIGNMENTS

RESULT 1  
US-09-837-992-3  
; Sequence 3, Application US/09837992  
; Patent No. US20020081687A1  
; GENERAL INFORMATION:  
; APPLICANT: Tian, Hui  
; APPLICANT: Schultz, Joshua  
; APPLICANT: Shan, Bei  
; TITLE OF INVENTION: Sticosterolemia, Susceptibility Gene (SSG) : Compositions  
; FILE REFERENCE: 018781-006020US  
; CURRENT APPLICATION NUMBER: US/09/837,992  
; CURRENT FILING DATE: 2001-04-18  
; PRIOR APPLICATION NUMBER: US 60/198,465  
; PRIOR FILING DATE: 2000-04-18  
; PRIOR APPLICATION NUMBER: US 60/204,234  
; PRIOR FILING DATE: 2000-05-15  
; NUMBER OF SEQ ID NOS: 45  
; SOFTWARE: PatentIn Ver. 2.1  
; SEQ ID NO: 3  
; LENGTH: 651  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
; FEATURE:  
; OTHER INFORMATION: human sitosterolemia susceptibility gene (SSG)  
; OTHER INFORMATION: amino acid sequence  
US-09-837-992-3

Query Match 100.0%; Score 3326; DB 9; Length 651;  
Best Local Similarity 100.0%; Pred. No. 1.5e-309; Indels 0; Gaps 0;  
Matches 651; Conservative 0; Mismatches 0;  
Cy 1 MGDLSSLTPGSGMGLQVNRGSSLEGAPATAPPHSHGILHAQSVSHRVRPMDITSC 60  
Db 1 MGDLSSLTPGSGMGLQVNRGSSLEGAPATAPPHSHGILHAQSVSHRVRPMDITSC 60  
Cy 61 RQWTRQLKXVSLVSGQIMCTLGSSGSKTLLDAMSGRLRAGFLGAYVNGRAL 120

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Db 61 RQWTRQILKDVSLVYVESGQIMCIGSSGSGKTTLLDAMSGRLGAGTFLGEVYVNGRAL 120
Qy 121 RREOFQDCFSYVLOSDDLSSLTVEETLHYTALLAIRGNPGSPQKVEAVMAELSLSHV 180
Db 121 RREOFQDCFSYVLOSDDLSSLTVEETLHYTALLAIRGNPGSPQKVEAVMAELSLSHV 180
Qy 181 ADRLIGNVSLGGISTGERRRVSIQAOLLODPKVMLEPDEPTGLDQMTANOIVLLVELAR 240
Db 181 ADRLIGNVSLGGISTGERRRVSIQAOLLODPKVMLEPDEPTGLDQMTANOIVLLVELAR 240
Qy 241 RNRIVVLTTHQPRSELFDLPKIALISFGEILFCGTPAEMLEPNDGYPCEHNSNPDF 300
Db 241 RNRIVVLTTHQPRSELFDLPKIALISFGEILFCGTPAEMLEPNDGYPCEHNSNPDF 300
Qy 301 YMDLTSVDTQSKEREIETSKRVQMIESAAYKKSALCHTKLNIEMKHLKTLPMVPFKTKD 360
Db 301 YMDLTSVDTQSKEREIETSKRVQMIESAAYKKSALCHTKLNIEMKHLKTLPMVPFKTKD 360
Qy 361 SPGVFSKLGVLRLRYTRNLVRNKLAIVITRLLQNLIMGFLFLFVLVRVSNVLKGAIDRV 420
Db 361 SPGVFSKLGVLRLRYTRNLVRNKLAIVITRLLQNLIMGFLFLFVLVRVSNVLKGAIDRV 420
Qy 421 GLIYQVGAATPYTGMLNANLFPVLRAVSDQSGLYQKQOMLAVLHVPESVATM 480
Db 421 GLIYQVGAATPYTGMLNANLFPVLRAVSDQSGLYQKQOMLAVLHVPESVATM 480
Qy 481 IFSSVCYWTGLHPEVARFGYFSAALLAPHLIGEFLLVLGIQNPINVSVALLSIA 540
Db 481 IFSSVCYWTGLHPEVARFGYFSAALLAPHLIGEFLLVLGIQNPINVSVALLSIA 540
Qy 541 GVLVSGGFLRNIQEMPIPKIISYTFQKYCEIIVNVEFYGLNFTGSSSNVSTTNPMC 600
Db 541 GVLVSGGFLRNIQEMPIPKIISYTFQKYCEIIVNVEFYGLNFTGSSSNVSTTNPMC 600
Qy 601 AFTQGIQFIETKCPGATSRFTMNFLLISFIPALVILGIIVFKIRDLHSR 651
Db 601 AFTQGIQFIETKCPGATSRFTMNFLLISFIPALVILGIIVFKIRDLHSR 651

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RESULT 2
US-09-989-981A-6
; Sequence 6, Application US/09989981A
; Publication No. US20030049730A1
; GENERAL INFORMATION:
; APPLICANT: Hobbs, Helen H.
; APPLICANT: Shan, Bei
; APPLICANT: Barnes, Robert
; APPLICANT: Tian, Hui
; APPLICANT: Tularik Inc.
; APPLICANT: Board of Regents, The University of Texas System
; TITLE OF INVENTION: ABCG5 and ABCG8: Compositions and Methods of Use
; FILE REFERENCE: 018781-007320US
; CURRENT APPLICATION NUMBER: US/09/989,981A
; CURRENT FILING DATE: 2002-07-23
; PRIOR APPLICATION NUMBER: US 60/252,235
; PRIOR FILING DATE: 2000-11-20
; PRIOR APPLICATION NUMBER: US 60/253,645
; PRIOR FILING DATE: 2000-11-28
; NUMBER OF SEQ ID NOS: 13
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 6
; LENGTH: 651
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; OTHER INFORMATION: human ABCG5 (hABCG5)
US-09-989-981A-6

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Query Match 100.0%; Score 3326; DB 10; Length 651;  
 Best Local Similarity 100.0%; Pred. No. 1.5e-309;  
 Matches 651; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Qy 1 MGDLSITPGSGMG:QVNRGSGSSLEGAPATAPEPHSIGITLHASYVSYSHRVRPMDITSC 60
Db 1 MGDLSITPGSGMG:QVNRGSGSSLEGAPATAPEPHSIGITLHASYVSYSHRVRPMDITSC 60
Qy 61 RQWTRQILKDVSLVYVESGQIMCIGSSGSGKTTLLDAMSGRLGAGTFLGEVYVNGRAL 120
Db 61 RQWTRQILKDVSLVYVESGQIMCIGSSGSGKTTLLDAMSGRLGAGTFLGEVYVNGRAL 120
Qy 121 RREOFQDCFSYVLOSDDLSSLTVEETLHYTALLAIRGNPGSPQKVEAVMAELSLSHV 180
Db 121 RREOFQDCFSYVLOSDDLSSLTVEETLHYTALLAIRGNPGSPQKVEAVMAELSLSHV 180
Qy 181 ADRLIGNVSLGGISTGERRRVSIQAOLLODPKVMLEPDEPTGLDQMTANOIVLLVELAR 240
Db 181 ADRLIGNVSLGGISTGERRRVSIQAOLLODPKVMLEPDEPTGLDQMTANOIVLLVELAR 240
Qy 241 RNRIVVLTTHQPRSELFDLPKIALISFGEILFCGTPAEMLEPNDGYPCEHNSNPDF 300
Db 241 RNRIVVLTTHQPRSELFDLPKIALISFGEILFCGTPAEMLEPNDGYPCEHNSNPDF 300
Qy 301 YMDLTSVDTQSKEREIETSKRVQMIESAAYKKSALCHTKLNIEMKHLKTLPMVPFKTKD 360
Db 301 YMDLTSVDTQSKEREIETSKRVQMIESAAYKKSALCHTKLNIEMKHLKTLPMVPFKTKD 360
Qy 361 SPGVFSKLGVLRLRYTRNLVRNKLAIVITRLLQNLIMGFLFLFVLVRVSNVLKGAIDRV 420
Db 361 SPGVFSKLGVLRLRYTRNLVRNKLAIVITRLLQNLIMGFLFLFVLVRVSNVLKGAIDRV 420
Qy 421 GLIYQVGAATPYTGMLNANLFPVLRAVSDQSGLYQKQOMLAVLHVPESVATM 480
Db 421 GLIYQVGAATPYTGMLNANLFPVLRAVSDQSGLYQKQOMLAVLHVPESVATM 480
Qy 481 IFSSVCYWTGLHPEVARFGYFSAALLAPHLIGEFLLVLGIQNPINVSVALLSIA 540
Db 481 IFSSVCYWTGLHPEVARFGYFSAALLAPHLIGEFLLVLGIQNPINVSVALLSIA 540
Qy 541 GVLVSGGFLRNIQEMPIPKIISYTFQKYCEIIVNVEFYGLNFTGSSSNVSTTNPMC 600
Db 541 GVLVSGGFLRNIQEMPIPKIISYTFQKYCEIIVNVEFYGLNFTGSSSNVSTTNPMC 600
Qy 601 AFTQGIQFIETKCPGATSRFTMNFLLISFIPALVILGIIVFKIRDLHSR 651
Db 601 AFTQGIQFIETKCPGATSRFTMNFLLISFIPALVILGIIVFKIRDLHSR 651

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RESULT 3
US-10-090-455-6
; Sequence 6, Application US/10090455
; Publication No. US20030027259A1
; GENERAL INFORMATION:
; APPLICANT: Chen, Hongyun
; APPLICANT: Le Bihan, Stephane
; TITLE OF INVENTION: NOVEL ABCG4 TRANSPORTER AND USES THEREOF
; FILE REFERENCE: 100103.406
; CURRENT APPLICATION NUMBER: US/10/090,455
; CURRENT FILING DATE: 2002-03-01
; NUMBER OF SEQ ID NOS: 17
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 6
; LENGTH: 651
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-090-455-6

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Query Match 100.0%; Score 3326; DB 14; Length 651;  
 Best Local Similarity 100.0%; Pred. No. 1.5e-309;  
 Matches 651; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Qy 1 MGDLSITPGSGMG:QVNRGSGSSLEGAPATAPEPHSIGITLHASYVSYSHRVRPMDITSC 60
Db 1 MGDLSITPGSGMG:QVNRGSGSSLEGAPATAPEPHSIGITLHASYVSYSHRVRPMDITSC 60
Qy 61 RQWTRQILKDVSLVYVESGQIMCIGSSGSGKTTLLDAMSGRLGAGTFLGEVYVNGRAL 120

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Query Match 82.5%; Score 2744.5; DB 10; Length 652;  
 Best Local Similarity 80.2%; Pred. No. 8.8e-254;  
 Matches 523; Conservative 64; Mismatches 64; Indels 1; Gaps 1;

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QY 1 MGDLSSLTTPGSGMGIQVNRGSSSLEGAAPATAPEP-HSLGILHASYSVSHRVRWMDITS 59
DB 1 MGELPFLSPBEGARGPHINRGSLSSLEQSVGTGRHSLSGLVLAHVSYSVSNKVGPMWNKIS 60
QY 60 CROQWROIILNDVSLYVESGOIMCIGSSGSKTTLDPAMSGRLGRAGTFLGEAYYNGRA 119
DB 61 CQOKMDRIILNDVSLYISGQIMCIGSSGSKTTLDPAGRLRGTGLEGFVNGCE 120
QY 120 LRREGQDQCFSVYILOSDFLLSSLTIVRETLHYTALIAIRGNPSGFQKKVEAWEISLSH 179
DB 121 LRDPQDQCFSVYILOSDFLLSSLTIVRETLHYTALIAIRGNPSGFQKKVEAWEISLSH 180
QY 180 VADRILGNVSLGTGERRRYSIAOULODPKVWLPEPTTGHDCMTANQIVTLVLEIA 239
DB 181 VADQITGSIYNGSISGERRRYSIAOULODPKVWLPEPTTGHDCMTANQIVTLVLEIA 240
QY 240 RMRRLVLTIIHQPSSELFQLEPKIAISFGELIFCGTPEAKMLDFPNDGYPCEPHSNPD 299
DB 241 RDRRLVLTIIHQPSSELFQLEPKIAISFGELIFCGTPEAKMLDFPNDGYPCEPHSNPD 300
QY 300 FEMDLTSVDQSKEREITSKRVOMIESAYKSAICHKTLNIRMKHLKTLPMVPPFTK 359
DB 301 FEMDLTSVDQSKEREITSKRVOMIESAYKSAICHKTLNIRMKHLKTLPMVPPFTK 360
QY 360 DSPGVSKLGVLLRVRTRNLVANKLAVITRLQNLIMGLFLLFVLVRSVNLGAIQDR 419
DB 361 DPGMFGLKGVLLRVRTRNLVANKLAVITRLQNLIMGLFLLFVLVRSVNLGAIQDR 420
QY 420 VALLIQFQATPYTGMLNANVLFVLRVAVDSQSDGQYQKQWMLAALVLEFSVAT 479
DB 421 VALLIQFQATPYTGMLNANVLFVLRVAVDSQSDGQYQKQWMLAALVLEFSVAT 480
QY 480 MIFSSVCWTTLGLHPEVARFGYFSAAALAPHLIGFLLVLLGIQVNNIVNSVVALISI 539
DB 481 VIFSSVCWTTLGLHPEVARFGYFSAAALAPHLIGFLLVLLGIQVNNIVNSVVALISI 540
QY 540 AGVLVSGFLNIIQEMPIPKIISYFTPOKYSCELLVNNERFGLNFTGSSNVSATTNPM 599
DB 541 SGLLISGSGFIRNIOEMPIPKIIGYFTPOKYSCELLVNNERFGLNFTGSSNVSATTNPM 600
QY 600 CAFTGCIQPIEKTGCGATSRFTMNFLIYSFIPALVIGIVVFKIRDLHISR 651
DB 601 CAITGCVQPIEKTGCGATSRFTMNFLIYSFIPALVIGIVVFKIRDLHISR 652

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RESULT 6  
 US-10-104-047-2795  
 ; Sequence 2795, Application US/10104047  
 ; Publication No. US20030236392A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: HELIX RESEARCH INSTITUTE  
 ; TITLE OF INVENTION: NO. US20030236392A1 full length cDNA  
 ; FILE REFERENCE: H1-A0105  
 ; CURRENT APPLICATION NUMBER: US/10/104,047  
 ; PRIOR FILING DATE: 2002-03-25  
 ; PRIOR APPLICATION NUMBER:  
 ; NUMBER OF SEQ ID NOS: 4096  
 ; SOFTWARE: PatentIn Ver. 2.1  
 ; SEQ ID NO 2795  
 ; LENGTH: 256  
 ; TYPE: PRT  
 ; ORGANISM: Homo sapiens  
 US-10-104-047-2795

Query Match 39.3%; Score 1308; DB 15; Length 256;  
 Best Local Similarity 100.0%; Pred. No. 1.2e-116;  
 Matches 256; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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QY 396 MGELFLFVLVRSVNLKGAIDRVGLLYQFVGATPYTGMLNANVLPVLRVAVDSQESQD 455
DB 1 MGELFLFVLVRSVNLKGAIDRVGLLYQFVGATPYTGMLNANVLPVLRVAVDSQESQD 60
QY 456 GLYQKQWMLAALVLPFSVATMTFSSVCYWTTLGLHPEVARFGYFSAAALAPHLIGEF 515
DB 61 GLYQKQWMLAALVLPFSVATMTFSSVCYWTTLGLHPEVARFGYFSAAALAPHLIGEF 120
QY 516 LELVLLGIQVNNIVNSVVALISIAVIVGSGFLNIIQEMPIPKIISYFTPOKYSCEL 575
DB 121 LELVLLGIQVNNIVNSVVALISIAVIVGSGFLNIIQEMPIPKIISYFTPOKYSCEL 180
QY 576 VNEFYGLNFTGSSNVSATTNPMCAFOTGIGIPIEKTGCGATSRFTMNFLIYSFIPALV 635
DB 181 VNEFYGLNFTGSSNVSATTNPMCAFOTGIGIPIEKTGCGATSRFTMNFLIYSFIPALV 240
QY 636 ILGIVVFKIRDLHISR 651
DB 241 ILGIVVFKIRDLHISR 256

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RESULT 7  
 US-09-989-981A-4  
 ; Sequence 4, Application US/0998981A  
 ; Publication No. US20030049730A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Hobbs, Helen H.  
 ; APPLICANT: Snaa, Bel  
 ; APPLICANT: Barnes, Robert  
 ; APPLICANT: Tian, Hui  
 ; APPLICANT: Tularik Inc.  
 ; APPLICANT: Board of Regents, The University of Texas System  
 ; TITLE OF INVENTION: ABCG5 and ABCG8: Compositions and Methods of Use  
 ; FILE REFERENCE: 018781-007320US  
 ; CURRENT APPLICATION NUMBER: US/09/989,981A  
 ; PRIOR FILING DATE: 2002-07-23  
 ; PRIOR APPLICATION NUMBER: US 60/252,235  
 ; PRIOR FILING DATE: 2000-11-20  
 ; PRIOR APPLICATION NUMBER: US 60/253,645  
 ; PRIOR FILING DATE: 2000-11-28  
 ; NUMBER OF SEQ ID NOS: 13  
 ; SOFTWARE: PatentIn Ver. 2.1  
 ; SEQ ID NO 4  
 ; LENGTH: 672  
 ; TYPE: PRT  
 ; ORGANISM: Mus musculus  
 ; FEATURE:  
 ; OTHER INFORMATION: mouse ABCG8 (mABCG8)  
 US-09-989-981A-4

Query Match 21.0%; Score 697; DB 10; Length 672;  
 Best Local Similarity 29.1%; Pred. No. 2.2e-57;  
 Matches 195; Conservative 129; Mismatches 263; Indels 84; Gaps 18;

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QY 15 LQVNRGSSSLEGAAPATAPEP-HSLGILHASYSVSHRVR-----PMD-ITSCR 61
DB 17 LQDASGLQDSL-----FSSSDNSLYTTISGQSTLEVDLTIVVDIASQVPEQLAQK 72
QY 62 QOWTROJ-----LKDVSLYVESGOIMCIGSSGSKTTLDPAMSGRLGRAGTFLGE 112
DB 73 IPWSSHSGDSCEIGIRNLSFKVRSQOMLAIIGSSCGRASLLDVITGR-GHGKMKSGQ 131
QY 113 VYVNGRALRREGQDQCFSVYILOSDFLLSSLTIVRETLHYTALIAIRGNPSGFQKKVEA 171
DB 132 IWINGQSTPQLVRKCAVHRQHDQLPNLTVARETLAFLNOMLEPRTFSGAQDKRVEDV 191
QY 172 MAELSLSHVADRILGNVSLGTGERRRYSIAOULODPKVWLPEPTTGHDCMTANQIV 231
DB 192 IAEFLRQCANTRVGNVYVSGERRRYSIGVQLMNGIILDEPTSGLDSFTAHLN 251
QY 232 VALLVEARNRRLVLTIIHQPSSELFQLEPKIAISFGELIFCGTPEAKMLDFPNDGYP 291

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Db 252 VTTLSLHAGNRLVLSLHQPSSDIFRLFDVLVLTSGTPIYLGAQOQVFTISIGHPC 311  
 QY 292 PEHNPDPFMDLTSVDTSQKEREIETSKRVOMIESAYKKA-----ICHTLKNIERM 345  
 Db 312 PRKSNADYVDLTSIDRSKEREVATVKAOSLALFLKXQGFDDFLWKAKEALNTS 371  
 QY 346 KHLKLPMPFPTKDS-----PGVSKLGVLRLVTRNLRVKNLAVITLLONLIMG 397  
 Db 372 THVSLTL-----TQDDCGTAVELPMQFSTLIRQISNDFRDLPTLLIHGSEACLS 427  
 QY 398 LPLFLVLRVSNVLSKAIODRVGLLYCFVGAAPYGMNANVLPVLRAVDSQDGL 457  
 Db 428 LIIGFLYHGGAQOL--SFMDTALLPMGALIPRVILDVSKCHSESMLYLEBGL 485  
 QY 458 YQKQMLAYALHVLPPSVATMIFSSVCYWTGLHPEVARFGYSALILAPHLIGEL- 516  
 Db 486 YTAGPYFFAKILGELPEHCAYVLIYAMPYLTNLRPVELF-----DL--HPLVWL 537  
 QY 517 -----TLVLLGIQVQNPNI--VNSVVALLSIAGVLVSGFLRNIOEMPIPKITSYFTPOKY 570  
 Db 538 VECRRMALAASAMLPFTFMSFFFCALYNSPFLTAGFNTDNLMTVPAWISKSLFRW 597  
 QY 571 CSEILVNEFYGINFT--CGSSNVSVTTPMCAFTQGIQFIKTCPGATSRFTMFLILY 628  
 Db 598 CFSGLMQIQBNHLYTTQIGNFTFSILGDTM-----ISAMDLNSHPLY 640  
 QY 629 SFIPALVIIGI 639  
 Db 641 AYY--LIVIGI 649

## RESULT 8

US-09-989-981a-8  
 ; Sequence 8, Application US/09989981a  
 ; Publication No. US20030049730A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Hobbs, Helen H.  
 ; APPLICANT: Shan, Bei  
 ; APPLICANT: Barnes, Robert  
 ; APPLICANT: Tian, Hui  
 ; APPLICANT: Talarik Inc.  
 ; APPLICANT: Board of Regents, The University of Texas System  
 ; TITLE OF INVENTION: ABC8 and ABC88: Compositions and Methods of Use  
 ; FILE REFERENCE: 018781-007320US  
 ; CURRENT APPLICATION NUMBER: US/09/989,981a  
 ; CURRENT FILING DATE: 2002-07-23  
 ; PRIOR APPLICATION NUMBER: US 60/252,235  
 ; PRIOR FILING DATE: 2000-11-20  
 ; PRIOR APPLICATION NUMBER: US 60/253,645  
 ; PRIOR FILING DATE: 2000-11-28  
 ; NUMBER OF SEQ ID NOS: 13  
 ; SOFTWARE: PatentIn Ver. 2.1  
 ; SEQ ID NO 8  
 ; LENGTH: 673  
 ; TYPE: PRT  
 ; ORGANISM: Homo sapiens  
 ; FEATURE:  
 ; OTHER INFORMATION: human ABC88 (hABC88)  
 US-09-989-981a-8

Query Match 21.0%; Score 697; DB 10; Length 673;  
 Best Local Similarity 28.9%; Pred. No. 2.2e-57;  
 Matches 187; Conservative 124; Mismatches 241; Indels 96; Gaps 16;  
 QY 8 TPGGSMGLQVNRGSSQLLEGAPAT--APEPHSLGILHASYSVSHRVR--PWND--ITSCHQOW 64  
 Db 16 TPQDTGLODRLPFSSESDNSLYFTYSGQPNLTLEVRDLYQVDLASQVPMFEQLAQFPMW 75  
 QY 65 TRQI-----LKDVLYVESQIMCIISSGSGKTTLLDAMSGRLGAGTF--LGEVYV 115  
 Db 76 TSPSCQNSCEIGIQLNLSFKVRSGQMLAIISGSGGASLLDVITGR--GKGKIKSGQIWI 134  
 QY 116 NGRALREOFQDCFSYVLOSPTLLSLTVRETLHYTALLAI--RKNPGSFQKVEAYMAE 174

Db 135 NGQPSDFQVLRKCVAAHRQNNQLLPNLTVEETLAFIAQKMLPPTFGQADKKEVEVIAE 194  
 QY 175 LSLSHVADRLIGVNSLGGISTGERRRVSIAQLLODPKVMLEPPTGLDCMTANQIVVL 234  
 Db 195 LRRLQCADTRVGNVNYVGLSGGERRRVSIGVQLNMPGILILDEPISGDSFPAHLVKT 254  
 QY 235 LVELARRNRIVLTLTHQPSRELFOQPDKAIISFGBELIFCGTAEMLDPPNDGYPCEH 294  
 Db 255 LSRILAKGNRLVLSLHQPSSDIFRLFDVLVLTSGTPIYLGAQOQVFTISIGHPC 311  
 QY 295 SNPDPFMDLTSVDTSQKEREIETSKRVOMIESAYKKAICHTLKNIEEMKL----- 348  
 Db 315 SNPADFYVDLTSIDRSKEREQELATREKQSLALF-----LEKVRDLDBELWK 362  
 QY 349 -----KTLPM-----VPEFTKDSPGVSKLGVLRLVTRNLRVKNLAVITRL 390  
 Db 363 AETKDLDEDCVSSVPLDNTCLPSPTK--MPGAVQGFLLIRQISNDFRDLPTLLIHG 421  
 QY 391 LQNLIMGELFLFVLRLVRSVVLKGAIQ-----DRVGLLYCFVGAAPYGMNANVLPVL 446  
 Db 422 AEACLMSNTIGFLYFG-----HQSILSFMDTALLPMGALIPRVILDVSKCSER 475  
 QY 447 AVSDQESQDGLYQKQMLAYALHVLPPSVATMIFSSVCYWTGLHPEVARF----- 499  
 Db 476 AMLYELEDGLYTTGPFYFAKILGELPEHCAYIILIYGMPTYMLANLRFGLQFLHPLV 535  
 QY 500 -----GYFAALLAPHLIGELFLTVLGLVQNPNI-VNSVVALLSIAGVLVSGFL 549  
 Db 536 WLVEFCRIMALAALALPFTFMASSFS-----NALYNSFYLAG---GFW 577  
 QY 550 RNQEMPIPKITSYFTFOKCEILVNEFYGINFTCGSSNVSVTN 597  
 Db 578 INLSLMTVPWAKISKVFLRMCFGLMKIQFSRRTYMPGNTLIAYS 625

## RESULT 9

US-10-090-455-7  
 ; Sequence 7, Application US/10090455  
 ; Publication No. US20030027259A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Chen, Hongyun  
 ; APPLICANT: Le Bihan, Stephanie  
 ; TITLE OF INVENTION: NOVEL AECG4 TRANSPORTER AND USES THEREOF  
 ; FILE REFERENCE: 100103.406  
 ; CURRENT APPLICATION NUMBER: US/10/090,455  
 ; CURRENT FILING DATE: 2002-03-01  
 ; NUMBER OF SEQ ID NOS: 17  
 ; SOFTWARE: FastSeq for Windows Version 4.0  
 ; SEQ ID NO 7  
 ; LENGTH: 673  
 ; TYPE: PRT  
 ; ORGANISM: Homo sapiens  
 US-10-090-455-7

Query Match 21.0%; Score 697; DB 14; Length 673;  
 Best Local Similarity 28.9%; Pred. No. 2.2e-57;  
 Matches 187; Conservative 124; Mismatches 241; Indels 96; Gaps 16;  
 QY 8 TPGGSMGLQVNRGSSQLLEGAPAT--APEPHSLGILHASYSVSHRVR--PWND--ITSCHQOW 64  
 Db 16 TPQDTGLODRLPFSSESDNSLYFTYSGQPNLTLEVRDLYQVDLASQVPMFEQLAQFPMW 75  
 QY 65 TRQI-----LKDVLYVESQIMCIISSGSGKTTLLDAMSGRLGAGTF--LGEVYV 115  
 Db 76 TSPSCQNSCEIGIQLNLSFKVRSGQMLAIISGSGGASLLDVITGR--GKGKIKSGQIWI 134  
 QY 116 NGRALREOFQDCFSYVLOSPTLLSLTVRETLHYTALLAI--RKNPGSFQKVEAYMAE 174  
 Db 135 NGQPSDFQVLRKCVAAHRQNNQLLPNLTVEETLAFIAQKMLPPTFGQADKKEVEVIAE 194  
 QY 175 LSLSHVADRLIGVNSLGGISTGERRRVSIAQLLODPKVMLEPPTGLDCMTANQIVVL 234

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Db      195 LRLROCAADTRVGNMYVSGLSGGERRRRSIVGVLNNPGLILDEPTSGLSFTAHNIVKT 254
Qy      225 LVELARRRRIYVLTTHOPRSELPFQDRIALISFGEILFCGTPAEMLDPFENDCGYPCPEH 294
Db      225 LSRLLKGRRLVLIISHQSRSDIFRLFDVLMTSGTPIYLGAQHMVGYFTALIGYPCPRY 314
Qy      295 SNPFDFYMDLTSVDTQSKEREIETSKRVQMIESAYKKAICHKTLKNIEMKHL----- 348
Db      315 SNPAFYVDLTSIDRRSREOEIATREKAQSIALAF-----LEKTRDLDDELW 362
Qy      349 -----KTLPM-----VPEKTRDSPGVSKVLRLRTRVLVANKLAVITRL 390
Db      363 AETKLDDETCYESSVTPLDTRCLSPTR-MGAVQQTTLIRQISDFDLPTLLHG 421
Qy      391 LQNLIMGELFELFVLVRVSNVLKGAIQ-----DRVGLVQVGAATPYTGMLNANLFPVLR 446
Db      422 ABACIMSTIGFLYRG-----HGSIQSFMDTALLFENIGALLPENVILDIVISKYSER 475
Qy      447 AVSDSDSDGLYQKQOMLALYALHTLPSVATMTFSSVCYWTGLHREVARF----- 499
Db      476 AMLYELEDGLTTPYFPFAKILGELPCHCAIITIGMPTWLANLRGLOPFLHLLV 535
Qy      500 -----GYFSALLAPHLIGFLTLVLLGIQVNPINVSVALISIAVLVSGGFL 549
Db      536 WLVPFCRIMLAAALLPFTFMAFFS-----NALYNSFYLAG-----GFM 577
Qy      550 ENIQMPFPFKISYFTQKYSELVYNEFYGLNFTGSSNSVTTN 597
Db      578 INLSLMTVPAMVSKVSEFLWCFEGMKRIQFSRTYKMPDLNLTAAVS 625

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RESULT 10
US-09-961-086-1
; Sequence 1, Application US/09961086
; Publication No. US20030036645A1
; GENERAL INFORMATION:
; APPLICANT: UNIVERSITY OF MARYLAND, BALTIMORE
; APPLICANT: ROSS, Douglas D.
; APPLICANT: DOYLE, L. Austin
; APPLICANT: ABRUZZO, Lynne
; TITLE OF INVENTION: BREAST CANCER RESISTANCE PROTEIN (BCRP) AND THE DNA
; FILE REFERENCE: EP19376-019
; CURRENT APPLICATION NUMBER: US/09/961,086
; CURRENT FILING DATE: 2001-09-21
; PRIOR APPLICATION NUMBER: US 60/073,763
; PRIOR FILING DATE: 1998-02-05
; PRIOR APPLICATION NUMBER: PCT/US99/02577
; PRIOR FILING DATE: 1999-02-05
; NUMBER OF SEQ ID NOS: 7
; SOFTWARE: PatentIn ver. 2.1
; SEQ ID NO 1
; LENGTH: 655
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-961-086-1

```

```

Query Match      20.5%; Score 682.5; DB 10; Length 655;
Best Local Similarity 29.2%; Pred. No. 5,2e-56;
Matches 182; Conservative 138; Mismatches 249; Indels 55; Gaps 18;
Qy      21 SSSLEGAPATP---EPHSLGILHASYSVSHRVPWMDITSCROQWROIILKXSLVYE 77
Db      13 SGNNTNGFPATASNDIKATGAVLSFHNICRYVLRKSGFLPCRPVEKEILISNINGIMK 72
Qy      78 SQQIMCIIGSSGSGKTTLLDAMSGRLGRAGTFLGEVYVNGARALREQFQDCFSYLLQSDT 137
Db      73 PG-LNALIGPTGGKSSLLDVLAARDPSG-LSGDVLING-APRANPKNSGYVQDDV 129
Qy      138 LLSLTVRETLHYTLALIRGNPG-SFQKYEAVMAELSLSHVADRLIGNYSLGISTG 196
Db      130 VNGTLTRENLPASALRLATTMTNHEKNERINRVYQELGLDCKVADSKVQIOPINGVSGG 189

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Qy      197 ERRRSIAAQLQDPKWLFEPTTGLDCMTANQVILLVEIARRNRIVLTTHOPRSEL 256
Db      190 ERRRTSIGMELLTDPILDEPTTGLDSTANAVALLIKRMSKGRITTFISHOPRYSI 249
Qy      257 FQDPIALISFGEILFCGTPAEMLDPFENDCGYPCPEHSPDFYMDLTSVDTQ-----SK 312
Db      250 FKLFDLTLASGRMLFHGPDAOLGYEBSAGYHCBAYNPADFELDIINGSTAVALNR 309
Qy      313 ERE-----IETSKR-----VQMIESAYKKAICHKT-----LKNIERMKLTLPMVPE 356
Db      310 EEDPKATEIIEPSKQKPLIEKLAETIYVNSPFYKETKALHQLSGEKKKLTVEKEISY 369
Qy      357 KTQDSPGVSKVLRLRTRVLVANKLAVITRLQNLIMGELF-LFVFLVRVSNVLKG 414
Db      370 TT-----SPCHQLRWKSRSFKNLGNPQASIQIITVTVLGSVIGALIFGLKNDST---- 421
Qy      415 AIDRVGLLYQVGAATPYTGMLNANLFPVLRAVSDSDGLYQKQOMLALYAL-HVLP 473
Db      422 GIGNRAGVLF-PLTNQCSVSASAVELFVVEKKLFHEXISGYRVSSYFLKLSLDLP 480
Qy      474 FSVATMTFSSVCYWTGLHREVARGYFSALLAPHLIGELTLVLLGIQVNPINVSV 533
Db      481 MTMLPBIIFTCTVYFEMLGKPRADAFVMMFTLM--WVAYSAMALAIAGQSVSYA 537
Qy      534 VALLSIAGV--LVGSGFLNIQEMPIPFKISYFTQKYSELVYNEFYGLNFTGSSN 591
Db      538 TLMTICFVFMNIFSGLLVNLTTIASWLSWLGYSIPRYGFTALQNHETLQGNFCG--- 594
Qy      592 VSVTINPMQATFOGQIFIEKTCG 615
Db      595 LNATGNNPCNYA-----TCTG 610

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RESULT 11
US-10-405-806-13
; Sequence 13, Application US/10405806
; Publication No. US2003022362A1
; GENERAL INFORMATION:
; APPLICANT: KOMATANI, HIDEYA
; APPLICANT: HARA, YOSHIKAZU
; APPLICANT: KOTANI, HIDEHITO
; APPLICANT: NAKAGAMA, RINAKO
; TITLE OF INVENTION: DRUG RESISTANT GENE AND USE THEREOF
; FILE REFERENCE: 234985050CONT
; CURRENT APPLICATION NUMBER: US/10/405,806
; CURRENT FILING DATE: 2003-04-03
; PRIOR APPLICATION NUMBER: PCT/JP01/08112
; PRIOR FILING DATE: 2001-09-18
; PRIOR APPLICATION NUMBER: JP2000-303441
; PRIOR FILING DATE: 2000-10-03
; NUMBER OF SEQ ID NOS: 17
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 13
; LENGTH: 655
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: ABCG2 482mutant sequence
US-10-405-806-13

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Query Match      20.5%; Score 682.5; DB 15; Length 655;
Best Local Similarity 29.2%; Pred. No. 5,2e-56;
Matches 182; Conservative 138; Mismatches 249; Indels 55; Gaps 18;
Qy      21 SSSLEGAPATP---EPHSLGILHASYSVSHRVPWMDITSCROQWROIILKXSLVYE 77
Db      13 SGNNTNGFPATASNDIKATGAVLSFHNICRYVLRKSGFLPCRPVEKEILISNINGIMK 72
Qy      78 SQQIMCIIGSSGSGKTTLLDAMSGRLGRAGTFLGEVYVNGARALREQFQDCFSYLLQSDT 137
Db      73 PG-LNALIGPTGGKSSLLDVLAARDPSG-LSGDVLING-APRANPKNSGYVQDDV 129
Qy      138 LLSLTVRETLHYTLALIRGNPG-SFQKYEAVMAELSLSHVADRLIGNYSLGISTG 196

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Db      130  VAGTIVRENLQFSAALRLATTMTNHEKNERINRINRQIOLGDKVADSKVQGFIRGVS GG 189
      197  ERRRVSIAQLLODPKVMLEDEPTGLDCMTANOIVLLVELARNRIVLTIHQPRSEL 256
      190  ERKRISIGMELLIDPSILFDEPTGLDSTANAVLLLRKMSKQGRITIFSIHQPRYSI 249
      257  FOLFDKAILSPGELLFCGTPAEMLDPFNDGCGPCPEHSNPPDFYMDLTSVDTO---SK 312
      250  FKLFDLSLTLASGRIMFHGPAQALGYFESAGYHCEAYNPNADFLDINGDSTAVANR 309
      313  ERE-----IETSKR---VQMIESAYKKSALCHKT-----LKNIERMKHLKTLPMVPF 356
      310  EEDFKATEIIEPSKQDKPLIEKLAETIYNSSFYKETKAEHLQSGGEKKKIVFEKISY 369
      357  KTKDSPGVFSKLGVLRLRYTRNLVNRKLAIVITRLQNLIMGLFL--LFFVLARVSNVLKG 414
      370  TT-----SFCQLRWVSRSFKNLLGNPQASIAQIIVTVLGLVIGALYFGKNDST--- 421
      415  AIDRVGLLYQFYGATPYTGMNANVLPVYLRVSDQESQDGLYQKQOMLAVYL-HVLP 473
      422  GIQNRAGVLF-FLTNQCCSSVSAVELFVYEKKLPIHEIYSGYRVSSYFLGKLSDDL 480
      474  FSVVATMIFSSVCYWTGLHPEVARFGYFSALLAPHLIGELTLVLGIQVQNPNTVNSV 533
      481  MMLPSSIIFTCIYFVFMGLPKADAFVVMVFTLM--MVAYSASSMALIAAGQSVSVA 537
      534  VALLSIAGV--LVSGFLRNIOEMPIPFKLIISYFTFOKYCEILVNEFYGLNFTCGSSN 591
      538  TLMTICFVFMMLFSGLVNLTLTIASWLSWLOFSPRIGFTALQHNFLGQNFPCG--- 594
      592  VSVTTPMCAFTQGIQFIETKCPG 615
      595  LNAIGNNPCNVA-----TCTG 610

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RESULT 12
US-09-981-353-35
; Sequence 35, Application US/09981353
; Patent No. US20020160382A1
; GENERAL INFORMATION:
; APPLICANT: Iasek, Amy W.
; APPLICANT: Jones, David A.
; TITLE OF INVENTION: GENES EXPRESSED IN COLON CANCER
; FILE REFERENCE: PA-0038 US
; CURRENT APPLICATION NUMBER: US/09/981,353
; CURRENT FILING DATE: 2001-10-11
; NUMBER OF SEQ ID NOS: 194
; SOFTWARE: PERL Program
; SEQ ID NO 35
; LENGTH: 655
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: misc feature
; OTHER INFORMATION: Inocyte ID No. US20020160382A1 5517972CD1
US-09-981-353-35

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```

Query Match      20.5%; Score 680.5; DB 9; Length 655;
Best Local Similarity 29.2%; Pred. No. 8.1e-56;
Matches 182; Conservative 137; Mismatches 250; Indels 55; Gaps 18;

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QY      21  SOSLSGAPATAP---EPHSIGILHASYSVSHRVRPWWMDITSCROQWTRQILKDVSLYE 77
      13  SQGNTNGFPATASNDLKAFTEGAVLSFHNICRYVKLKSGLPCKRYEKEKILSNINGIMK 72
      78  SQGIMCILSSGSGKTTLLDAMSGRLGRAGTFLGEVYVNGRALRREQDFCSYVLOSPT 137
      73  PG-LNALIGPTGGKSLDLVLAARKDPG-LSGDVLLING-APRAPNFCNNGGYVQDDV 129
      138  LLSLTVRETLHTALLARNGNPG--SFQKVEAVNAELSLSHVADRLLGNYSLSGISG 196
      130  VMGTLTVRENLQFSAALRLATTMTNHEKNERINRINRQIOLGDKVADSKVQGFIRGVS GG 189

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QY      197  ERRRVSIAQLLODPKVMLEDEPTGLDCMTANOIVLLVELARNRIVLTIHQPRSEL 256
      190  ERKRISIGMELLIDPSILFDEPTGLDSTANAVLLLRKMSKQGRITIFSIHQPRYSI 249
      257  FOLFDKAILSPGELLFCGTPAEMLDPFNDGCGPCPEHSNPPDFYMDLTSVDTO---SK 312
      250  FKLFDLSLTLASGRIMFHGPAQALGYFESAGYHCEAYNPNADFLDINGDSTAVANR 309
      313  ERE-----IETSKR---VQMIESAYKKSALCHKT-----LKNIERMKHLKTLPMVPF 356
      310  EEDFKATEIIEPSKQDKPLIEKLAETIYNSSFYKETKAEHLQSGGEKKKIVFEKISY 369
      357  KTKDSPGVFSKLGVLRLRYTRNLVNRKLAIVITRLQNLIMGLFL--LFFVLARVSNVLKG 414
      370  TT-----SFCQLRWVSRSFKNLLGNPQASIAQIIVTVLGLVIGALYFGKNDST--- 421
      415  AIDRVGLLYQFYGATPYTGMNANVLPVYLRVSDQESQDGLYQKQOMLAVYL-HVLP 473
      422  GIQNRAGVLF-FLTNQCCSSVSAVELFVYEKKLPIHEIYSGYRVSSYFLGKLSDDL 480
      474  FSVVATMIFSSVCYWTGLHPEVARFGYFSALLAPHLIGELTLVLGIQVQNPNTVNSV 533
      481  MMLPSSIIFTCIYFVFMGLPKADAFVVMVFTLM--MVAYSASSMALIAAGQSVSVA 537
      534  VALLSIAGV--LVSGFLRNIOEMPIPFKLIISYFTFOKYCEILVNEFYGLNFTCGSSN 591
      538  TLMTICFVFMMLFSGLVNLTLTIASWLSWLOFSPRIGFTALQHNFLGQNFPCG--- 594
      592  VSVTTPMCAFTQGIQFIETKCPG 615
      595  LNAIGNNPCNVA-----TCTG 610

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RESULT 13
US-10-120-687-61
; Sequence 61, Application US/10120687
; Publication No. US20030082155A1
; GENERAL INFORMATION:
; APPLICANT: Massachusetts General Hospital
; TITLE OF INVENTION: Stem Cells of the Islets of Langerhans and Their Use in Treating
; TITLE OF INVENTION: Meliitus
; FILE REFERENCE: 3284/1235B
; CURRENT APPLICATION NUMBER: US/10/120,687
; CURRENT FILING DATE: 2002-04-11
; PRIOR APPLICATION NUMBER: US60/169082
; PRIOR FILING DATE: 1999-12-06
; PRIOR APPLICATION NUMBER: US 09/963,875
; PRIOR FILING DATE: 2001-09-25
; PRIOR APPLICATION NUMBER: US 60/215109
; PRIOR FILING DATE: 2000-06-28
; PRIOR APPLICATION NUMBER: US 60/238880
; PRIOR FILING DATE: 2000-10-06
; PRIOR APPLICATION NUMBER: US 09/731261
; PRIOR FILING DATE: 2000-12-06
; NUMBER OF SEQ ID NOS: 61
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 61
; LENGTH: 655
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-120-687-61

```

```

Query Match      20.5%; Score 680.5; DB 14; Length 655;
Best Local Similarity 29.2%; Pred. No. 8.1e-56;
Matches 182; Conservative 137; Mismatches 250; Indels 55; Gaps 18;

```

```

QY      21  SOSLSGAPATAP---EPHSIGILHASYSVSHRVRPWWMDITSCROQWTRQILKDVSLYE 77
      13  SQGNTNGFPATASNDLKAFTEGAVLSFHNICRYVKLKSGLPCKRYEKEKILSNINGIMK 72
      78  SQGIMCILSSGSGKTTLLDAMSGRLGRAGTFLGEVYVNGRALRREQDFCSYVLOSPT 137

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Db      73 PG-LNALIGPTGGKSSLLDVLARKDPG-LSGDVLING-APRPANFKNSGVVQDDV 129
Qy      138 LLSLTYRETHYATLAIARRNGP-SFOKVEAVMAELISHVADRLIGVSGISTG 196
Db      130 VMGTLTYRETHYATLAIARRNGP-SFOKVEAVMAELISHVADRLIGVSGISTG 189
Qy      197 ERRRVSAIAOQLLODPKVMLEDEPTTGLDCMTANOIVLVELARNRIVLTHIQPSSE 256
Db      190 ERKRTSIMGELITDPSILFDEPTTGLDSSSTANAVLLILKMSKOGRTIIFS:HQPRYSI 249
Qy      257 FOLFEXKIALISFGLIICGTFAEMLD:FNDCGYPCPEHSNPFEDYMDLTSVDQ----SK 312
Db      250 FOLFEXKIALISFGLIICGTFAEMLD:FNDCGYPCPEHSNPFEDYMDLTSVDQ----SK 309
Qy      313 ERE-----IETSKR-----VOMISAYKSAICHKT-----LNTERMKLITLPMVVP 356
Db      310 EEDFKATEIIEPSKODKRLIEKLAIEIVNSGFYKETAELHQLSGEKKKKTIVFEKISY 369
Qy      357 KTKDSPGVFSKLGVLRRVTRNIVNKLAVITRLQNLINGLFL--LFFVLRRASNVLKG 414
Db      370 TT-----SFCHQLRWYSKSPFKLLGNPQASIAQIIVVGLVIGALYFGLKNDST---- 421
Qy      415 AIODRVGLIYQFVGAFTPTGMLNANVLPVLAASVDSODGLYOKQMMLAYAL-HVLP 473
Db      422 GIQNBAGVLF-FLTNGCFSSVSNAVELFVVEKLFHEIYISGYRVSSYFLKLLSDLLP 480
Qy      474 PSVATMTFSSVCYWTGLHPEVARFGYFSALLAPHLIGEFLLTVLIGVONRNIVNSV 533
Db      481 MRMLPSIIFTCIVYFMGLKPKADAFVMMFTLM---WVAVSASSMALAIAAGOSVSV 537
Qy      534 VALLSIAGV--LVSGGFRLNIQEMPIPKIISYFTFOKYCEIIVNEFEYGLNFTCGSSN 591
Db      538 TLMNTICFVHMVIFSGLLVNLTTIASWLSWQYFSIRYGFALQHNHFLQGNFCPG--- 594
Qy      592 VSVTTNPMCAFTQGIQITEKTCPG 615
Db      595 LNATGNNPCNYA-----TCTG 610

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```

RESULT 14
US-10-405-806-2
; Sequence 2, Application US/10405806
; Publication No. US2003023262A1
; GENERAL INFORMATION:
; APPLICANT: KOMATANI, HIDEYA
; APPLICANT: HARA, YOSHIKAZU
; APPLICANT: KOTANI, HIDEHITO
; APPLICANT: NAKAGAWA, RINKO
; TITLE OF INVENTION: DRUG RESISTANT GENE AND USE THEREOF
; FILE REFERENCE: 234985USOCNT
; CURRENT APPLICATION NUMBER: US/10/405,806
; PRIOR FILING DATE: 2003-04-03
; PRIOR APPLICATION NUMBER: PCT/JP01/08112
; PRIOR FILING DATE: 2001-09-18
; PRIOR APPLICATION NUMBER: JP2000-303441
; NUMBER OF SEQ ID NOS: 17
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 2
; LENGTH: 655
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-405-806-2

```

```

Query Match      20.5%; Score 680.5; DB 15; Length 655;
Best Local Similarity 29.2%; Pred. No. 8,1e-56;
Matches 182; Conservative 137; Mismatches 250; Indels 55; Gaps 18;
Qy      21 SSSSLGAPATP---EHSIGILHASVSHRVPMWMDISCRQOQTRQIKDVSLEYE 77
Db      13 SGGNTNGPFAIVSNDIKATFEGAVLSFNHICRVKLKSGFLPCKRKVEKEILSNINGIMK 72
Qy      78 SQQIICILGSSGSGKTTLLDAMSGRLGRAGTFLGEVYVNGALRRRQDQCFSSVYLOSDT 137

```

```

Db      73 PG-LNALIGPTGGKSSLLDVLARKDPG-LSGDVLING-APRPANFKNSGVVQDDV 129
Qy      138 LLSLTYRETHYATLAIARRNGP-SFOKVEAVMAELISHVADRLIGVSGISTG 196
Db      130 VMGTLTYRETHYATLAIARRNGP-SFOKVEAVMAELISHVADRLIGVSGISTG 189
Qy      197 ERRRVSAIAOQLLODPKVMLEDEPTTGLDCMTANOIVLVELARNRIVLTHIQPSSE 256
Db      190 ERKRTSIMGELITDPSILFDEPTTGLDSSSTANAVLLILKMSKOGRTIIFS:HQPRYSI 249
Qy      257 FOLFEXKIALISFGLIICGTFAEMLD:FNDCGYPCPEHSNPFEDYMDLTSVDQ----SK 312
Db      250 FOLFEXKIALISFGLIICGTFAEMLD:FNDCGYPCPEHSNPFEDYMDLTSVDQ----SK 309
Qy      313 ERE-----IETSKR-----VOMISAYKSAICHKT-----LNTERMKLITLPMVVP 356
Db      310 EEDFKATEIIEPSKODKRLIEKLAIEIVNSGFYKETAELHQLSGEKKKKTIVFEKISY 369
Qy      357 KTKDSPGVFSKLGVLRRVTRNIVNKLAVITRLQNLINGLFL--LFFVLRRASNVLKG 414
Db      370 TT-----SFCHQLRWYSKSPFKLLGNPQASIAQIIVVGLVIGALYFGLKNDST---- 421
Qy      415 AIODRVGLIYQFVGAFTPTGMLNANVLPVLAASVDSODGLYOKQMMLAYAL-HVLP 473
Db      422 GIQNBAGVLF-FLTNGCFSSVSNAVELFVVEKLFHEIYISGYRVSSYFLKLLSDLLP 480
Qy      474 PSVATMTFSSVCYWTGLHPEVARFGYFSALLAPHLIGEFLLTVLIGVONRNIVNSV 533
Db      481 MRMLPSIIFTCIVYFMGLKPKADAFVMMFTLM---WVAVSASSMALAIAAGOSVSV 537
Qy      534 VALLSIAGV--LVSGGFRLNIQEMPIPKIISYFTFOKYCEIIVNEFEYGLNFTCGSSN 591
Db      538 TLMNTICFVHMVIFSGLLVNLTTIASWLSWQYFSIRYGFALQHNHFLQGNFCPG--- 594
Qy      592 VSVTTNPMCAFTQGIQITEKTCPG 615
Db      595 LNATGNNPCNYA-----TCTG 610

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RESULT 15
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; Sequence 10, Application US/09866866A
; Patent No. US20020102244A1
; GENERAL INFORMATION:
; APPLICANT: Sorrentino, Brian
; APPLICANT: Schuetz, John
; TITLE OF INVENTION: A Method of Identifying and/or Isolating Stem Cells
; FILE REFERENCE: 1340-1-02CIP2
; CURRENT APPLICATION NUMBER: US/09/866,866A
; CURRENT FILING DATE: 2001-08-30
; PRIOR APPLICATION NUMBER: 09/584,586
; PRIOR FILING DATE: 2000-05-31
; PRIOR APPLICATION NUMBER: PCT/US99/11825
; PRIOR FILING DATE: 1999-05-27
; PRIOR APPLICATION NUMBER: 60/086,988
; PRIOR FILING DATE: 1998-05-28
; NUMBER OF SEQ ID NOS: 27
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 10
; LENGTH: 655
; TYPE: PRT
; ORGANISM: Homo sapien
US-09-866-866A-10

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Query Match      20.3%; Score 674.5; DB 9; Length 655;
Best Local Similarity 29.0%; Pred. No. 3,1e-55;
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Search completed: March 17, 2004, 19:53:51  
Job time : 26.0763 secs